



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ments of the body for rotation to the right better than for rotation to the left. During rotation to the left the rabbit must make nystagmatic movements to the right, and these were found to be more numerous when the rotation was to the left. In these cases then oscillations to right were the most readily obtained whether the animal was observed during or after rotation. It should be mentioned that when the frontal portion of the hemisphere was removed these differences in reaction were not observed.

When the lesion was made in the frontal portion of the brain, then compensatory movements were not affected. On the different effects of the lesion, according to its location, the authors lay no stress, but pass on to more general considerations. If after the injury to the brain there is a disturbance in compensatory movements—those of the eye being only one example—it must be due to a change in the irritability of the nervous mechanism involved in the reaction. This they think tends to favor the view of Goltz that “injury to the brain causes a decrease in the irritability of the lower centres in the spinal cord.” In general they determined a greater tension in the trunk muscles on the side opposite to the lesion, but the explanation of this observation is not given.

The ear of man: its past, present and future—Lecture IX. in the Biological lectures delivered at the Marine Biological Laboratory of Wood's Holl in the summer session of 1890. Boston, Ginn & Co., 1891.

This lecture contains a general presentation of some observations on the morphology of the vertebrate ear coupled with some remarks on its physiology. The morphological portion is to appear more in detail in an early number of the *Journal of Morphology*. The author argues that the internal ear is derived by modification from the organs of the lateral line, and that it is to be regarded as representing two sense organs, one indicated by the utricle and the other by the saccule, each with a system of semicircular canals. Taking his departure from Allis' paper on the development of the lateral line organs in the fish, he shows how from the first sinking in of the auditory pit to the full development of mammalian ear, the process is parallel to that which takes place in the organs of the lateral line. When thus regarded, the Cyclostome ear—which has been a stumbling block to the comparative anatomists—appears as a simpler and less developed ear rather than an aberrant or degenerate one. The double nature of the organ is suggested by the double nerve supply—by what in the higher forms are considered the two branches of the auditory nerve—and by the fact that, considered schematically, the organ may be divided into equivalent portions, using the prolongation of the ductus endolymphaticus as an axis. If we accredit the anterior and horizontal canals to the utricle we have the same number of groups of sensory cells as in the saccule and its appendages. To be sure the latter has but one canal—the posterior, with its proper crista—but it also contains the *macula acustica neglecta* of Retzius, which, if the canal belonging to it had developed, would have established the numerical symmetry that the scheme demands. In speaking of the physiology the author lays much stress on the contradictions among the older authors who have investigated the semicircular canals and does not utilize the recent results like those of Delarge and Breuer, which are, if anything, more important.

Die Kopfnerven von Salamandra maculata im vorgerückten embryonalstadium untersucht. Von Baron Jos. von Plessen und Dr. Med. JOHN RABINOVICZ. Mit 2 lithographischen doppeltefeln und 4 Zinkographien im Text. München, J. F. Lehmann, 1891.

The plates in this paper are from the sections reconstructed after the method of His and are very instructive. In this salamander the troch-

learis nerve is wanting; the ganglion of the fifth nerve is double; the glossopharyngeus appears to have no ganglion, but simply to pass thro' the vagus ganglion; and the hypoglossus in accordance with the observations of others has but one root, the ventral. This, however, divides into a dorsal and ventral ramus, and in the dorsal ramus a distinct ganglion is to be seen, thus restoring the hypoglossus in these forms to the type of the spinal nerves—an important observation.

On out-lying nerve cells in the mammalian spinal-cord. By CH S. SHERINGTON. Phil. Trans. Roy. Soc., 1890. 2 plates.

The author has examined the cord in man, the monkey (Bonnet, Jew and Rhesus), and dog, using sections from the cords of the cat, lion, calf, rat, mouse, rabbit and guinea-pig for comparison. The cells in question are those which lie outside of the gray matter among the white fibres, and they are conveniently subdivided for description into ventral, lateral and dorsal groups. The cells in these several localities are described, and they appear in each case similar to the cells of that portion of the gray matter near which they lie. By far the most interesting is the dorsal cells, which in a given section are scattered from the point of entrance of the dorsal roots to the column of Clarke. There is some evidence that these cells are bipolar—as is also the case for the cells in the column of Clarke—and the suggestion is made that we may have here homologues of the spinal ganglion cells still included in the substance of the cord, a suggestion which has much in its favor. From the descriptive nature of the paper the evidence for this view cannot be abstracted with advantage.

Die Ringbänder der Nervenfasern. Mitgetheilt nach Untersuchungen von DR. JOHANSON durch JUSTUS GAULE. Centrabl. f. Physiologie, Aug., 1891. Heft 11.

The communication is preliminary to the fuller paper now in press. Its bearing may be briefly indicated as follows: If the nerve of a frog, or rabbit be hardened in Eryk's fluid for 14 days, teased in water and stained for an hour with haematoxylin (alum .5%, Häm 20%), the axis cylinder is slightly tinged and at irregular intervals bands are darkly colored and are to be seen in the medullary sheath. This appearance it is argued is due to the presence here of some substance taking the haematoxylin stain and not to an insignificant deposit of the dye. These bands occupy the position of the well known clefts of Schmidt and Lantermann. They have a suggestion of fibres in them. Such is the appearance in May frogs. In June frogs the picture changes, and there is a clearly marked spiral fibre surrounding the nerve at these points. At this time, June, the axis cylinder of the nerves is small and shrunken. Later it assumes the full appearance found in the spring (May), frogs. This condition of the axis cylinders the authors associate with the proverbial misbehaviour of the June frogs when used for nerve-muscle work. It is also plain that this condition of the nerves occurs at the breeding season, and the influence of the reproductive process on these bands and the possibility of their being related to nuclear substances, are the aspects of the case which most interest Gaule.

The Journal of Comparative Neurology—a quarterly periodical devoted to the comparative study of the nervous system. Edited by C. L. HERRICK, Professor of Biology, etc., in the University of Cincinnati. Robert Clark & Co., Cincinnati, Ohio. Vol. I, No. 1, March; No. 2 June, 1891.

It is certainly desirable that the papers on comparative neurology should be grouped in some one publication, and the opportunity for this is offered by the new Journal. Original papers, reviews, notes on technique, bibliography and an editorial have formed the contents of the